Adaptation of e-Learning Courses to New Contexts

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Lifelong Learning

Outline

- Introduction to the research and *Skills Online*
- Rationale and objectives of research
- Key findings from literature
- Case study methodology
- Two cases examined:
  - University of Saskatchewan
  - English-speaking Caribbean countries
- Key findings and conclusions

Introduction

- Research study carried out at University of Oxford during 2008
    - Component of M.Sc. in e-Learning
    - Supported by *Skills Online*
- Directed at:
    - Evolution of *Skills Online* program
    - Other organizations contemplating adapting online courses

What is *Skills Online*?

- Internet-based continuing professional development program for front line public health practitioners
- Facilitated modules in English & French
- Offered at no cost to public health professionals since 2002
- Over 3,500 individuals have completed one or more modules

Skills Online: Implementation

- Relevant, timely, practical Canadian content

- Cohorts of 15-20 learners led by experienced, trained facilitator

- 8 weeks to complete a module

- Modules range from 25-40 hours in length

- Modules offered three times per year

Key Features of Modules

- Based on principles of adult learning
- Content mapped to the *Core Competencies for Public Health in Canada: Release 1.0*
- Self-assessments with instant feedback
- Discussion boards to share ideas
- Learning exercises that encourage application of knowledge to practice
- Links to external resources useful to practice

Research Rationale and Objectives

- Broad interest in reuse of online content

  – Reduce costs

  – Reduce duplication

- How are courses adapted into new contexts in practice?

- What can be learned that might be useful to other adaptations?

Research Literature

- Continuum of granularity:

    – Small, context-neutral learning objects, to

    – Full courses with implicit pedagogy

- Extensive research on development, storage, and reuse of learning objects and on learning object repositories

- Little research on repurposing of courses, even though courses are the natural educational unit

- Interesting issues of cultural adaptation

Quick Poll

- How many of those online have adapted an online course?

  – As developer, designer, facilitator, or subject-matter expert?

- How many have participated as a learner in an online course that was adapted from another context?

Research Questions

- Why did organizations undertake these projects?

  – What were their motivations? What issues arose?

- How was content localized?

  – How were appropriate language, examples identified?

- How was the course delivered?

  – How were cultural, educational differences addressed?

- How is content authenticated?

  – What were/are intellectual property issues addressed?

Case Study Research Methodology

- Appropriate to *how?* and *why?* questions that explore complex, bounded social phenomena
- Qualitative research approach:
  - 13 semi-structured, in-depth interviews with key stakeholders
  - 2 focus groups with U. of Saskatchewan students
  - Caribbean learners' post-module questionnaires
  - Debriefings with Caribbean facilitators
  - Other related documents and information

Two Cases Studied

- College of Medicine, University of Saskatchewan
  - Third-year, on campus undergraduate medical students
  - Similar culture, different learners
  - Adapt content and delivery

- English-speaking Caribbean countries
  - Public health professionals at a distance
  - Similar learners, different culture
  - Adapt through delivery and discussions

Generalization of Case Study Research Results

- Naturalistic generalization (Stake, 1995[1])

  - Readers transfers findings from the case to other situations based on their experience

- Analytic generalization (Yin, 2003[2])

  - Relate empirical results to appropriate theory

1. Stake, R.E. (1995) *The Art of Case Study Research*. London: Sage Publications.

2. Yin, R. K. (2003) *Case Study Research Design and Methods*. Third Ed. London: Sage Publications.

University of Saskatchewan Implementation

- Four modules combined into a single online module, with some content removed

- Part of a year-long community-health course

- Approximately 60 students, on campus, but studied content online and submitted assignments electronically

- Met in class with tutors after each module

University of Saskatchewan: Mixed Success Pedagogically

- Initial offerings had mixed success:
  - Content deemed excellent and appropriate
  - Work load for students difficult to manage
  - Wide range of effort applied by students

"We are preparing students for lifelong learning in using a method that they will encounter. The chalk and blackboard – they're not going to have much of that when they are professionals."

- College of Medicine, Faculty member

University of Saskatchewan: Long-term Strategic Benefits

- College wants to offer more online courses
  - Online graduate program for remote students
- Revising medical school curriculum
  - Some of the content in first year
- Working with other faculties of medicine across Canada on public health curricula

"This use of web-based learning may have more applicability in the next decade, as medical schools go to satellite campuses."
- College of Medicine, Faculty member

Caribbean Implementation

- Organized by Pan-American Health Organization
- Content similar to Canadian offerings, but with Caribbean cohorts
- Canadian facilitators, with a Caribbean "shadow" facilitator for one module
- Five cohorts (to end of 2008)
  - Overall 67% completion rates

Participation by Country

Country	Learners
Trinidad and Tobago	26
Grenada	7
Guyana	6
Jamaica	5
St Vincent and Grenadine	5
Belize	5
St Kitts and Nevis	4
Bahamas	4
Antigua and Barbuda	4
St Lucia	3
Anguilla	2
Dominica	2
Total	**73**

Caribbean
Learner Feedback

- Most problems were technical issues with Internet access
- Early cohorts struggled with online modality
- Most learners very pleased with modules
  - Caribbean-only cohorts well received

"I'm very strongly in support of this program. There is a lot of expertise in the Caribbean, but they need to be able to harness it and disseminate it through a virtual mechanism."
- PAHO Co-ordinator

Caribbean
Key benefits

- Most learners appreciated the opportunity to learn without having to travel

"It's the wave of the future. The less we have to dislocate people from their settings to teach them something, the better off we'll be."

- Interesting social issues around online interaction

"The anonymity of the online process gave them some added freedom and some added comfort."

- Caribbean Facilitator

Adapt or Create?

- Adaptation can provide a relatively easy entry point to online learning
- Allows recipient to gain confidence, expertise, organizational support for online learning
- Overall level of effort over time may be similar
- Care needs to be taken in pedagogical approach
  - Learners' access, abilities, time constraints, culture
  - A variety of adaptation options available

Strategic Issues

- In both cases, the motivations were greater than satisfying immediate educational goals
  - Addressed strategic requirements and long-term goals of both donor and recipient organizations
- Intellectual property issues are still outstanding and are being addressed

Partnerships are Key!

- Both donor and recipient organizations had to contribute significantly

  – Perseverance critical!

- Informal arrangements seemed to work effectively

  – Not bogged down in organizational bureaucracy

  – More formal arrangements will be necessary over time

- Clear roles and responsibilities important

Summary

- Adaptation of courses can be effective
  - Not restricted to small-granularity learning objects
- Level of effort for adaptation often substantial
  - Modification of content
  - Recruiting appropriate learners
  - Training facilitators
- Online learning allows a wide variety of adaptation possibilities to meet the needs of various learners
  - Adaptation of content and/or delivery approaches

For More Information

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- Please contact me if you would like a pdf copy of the work
- Preliminary results presented at PCF5, July 2008: http://www.wikieducator.org/images/4/43/PID_414.pdf